DO EPILEPTICS RECOVER?

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This question has so long been discussed by every one concerned in the study, treatment and family history of epileptics, without any definite conclusion being reached, that it now seems almost futile for any one even to broach the subject.

The writer believes that a very small percentage of epileptics actually do recover, but that a new onset of the disease is a fate hanging immediately over every former sufferer. Epilepsy, being a pure neurosis and having convulsions as its chief manifestation must be liable to remissions and renewals. Simply because a man has gone one month, or two months, or twelve months, or so many years, without a convulsion, should not for a moment induce us to state that epilepsy, with him, becomes in the future impossible or even improbable. So far as the writer has been able to investigate the life-history of so-called recovered epileptics, almost without exception, either that disease, or one of its numerous congeners, has fastened itself later upon the unhappy victim.

One bright young fellow, of a Hebrew family, had convulsions in infancy, grew up free from every trouble until he was twelve years of age, when by some untoward condition, from the history let us believe an enteric indigestion, pronounced epileptic seizures became frequent. Every suitable medicine, every suitable method known to medical science were employed, only leading to disappointment. At that time, after having suffered almost daily for four years, he went to Carlsbad, Germany, where either by the influence of the waters, the outdoor life, or the food, convulsions shortly ceased, and until his twenty-sixth year he was free from any evidences of epilepsy; even then epilepsy did not return, but the more fatal, yet happier paresis overtook him, with its attending convulsions, which we speak of as only *epileptiform*. Whether this fatal disease placed him beyond the reach of epilepsy, and cut short a miserable existence, or whether it blighted bright hopes and a splendid future, we are unable to say; but certain it is in this case we have had two so-called recoveries, one in infancy, and one at sixteen.

If epilepsy, as is slowly being conceded by the most observant thinkers to-day, is simply a manifestation of some form of malnutrition, stating a prognosis is mere guess work, so long as we do not know what form this perversion takes, or what changes it works in the intimate structure of the individual cells.

For practical purposes it is the custom of those who have the care and treatment of epileptics, to place two years free of convulsions as the limit of the epileptic condition. From Craig Colony lately seven have been discharged who have measured out this apprenticeship; but whether they go out into the world on a par with their fellow-beings, whether they can enjoy life to its fullest, or whether they are to be forever handicapped and restricted by the narrow limits of a tiresome dietary, and Puritanical habits, remains yet to be seen.

This is not a disease like typhoid fever or pneumonia, in which a specific germ must be present, and must multiply its kind, and live a life-history within itself, to produce definite symptoms and certain signs; but it is a disease which determines largely its own modes and manners of making itself felt; in other words it is purely functional in its manifestation, though fundamental in its origin.

We have one patient in whom an ounce of pork will produce a series of from five to a dozen convulsions; without this pork he will go for weeks, and even months (other things being favorable) without a single untoward accident. Would we call the permanent withdrawal of pork, provided his health remained good, a recovery? Not any more than we would say that tuberculosis, which had allowed us a short period of normal respiration, was cured. We have another patient, whose father declares that a single ear of roasted green corn, was the origin of all his trouble; and even to this day, he says that green corn in any shape will produce a series of convulsions. Let us say, however, that there are other things that produce like result; as is shown by the fact that he has attacks repeatedly without eating corn. Another patient is unable to take shellfish; and in others, alcoholic drinks will bring on a seizure within a few hours. Any number of patients may be made to have from one to a dozen convulsions at will, by giving them an acid sauce, as cranberry, then sweet milk. The permanent withdrawal of these hurtful articles would not be recovery.

We may take another view, even into another field of epilepsy, the Jacksonian and the traumatic. How many disappointments can we count that have followed the surgeon's knife and trephine? Every one knows that even where epilepsy is caused by depressed fracture and pressure on the brain, and an operation relieves such depression, the cure at best is only temporary. Even there we see that we have not reached the fundamental perversion that allows the seizures. To say that the nervous elements have been educated, or allowed to educate themselves, into a convulsive state, is mere nonsense. No man would think and seriously assert that the nerve cell, *per se,* could explode periodically and recover its normal status of its own free will. Epilepsy is not, and never will be, considered a habit-neurosis. Therefore, the removal of mere inciting causes, as depressed fractures, or cicatrices from the cerebrum, or adherent prepuces, or troublesome nails, cannot in any sense of the word be considered as curative, but must be regarded as simply an alleviative measure. There may be rare cases in which some one single inciting cause is so powerful as to be the one determining factor in the successive seizures, and in that case, after its removal, and until another equally potent inciting cause arises, we may pat ourselves on the back, and say that we have made a cure; but we should not allow our self-esteem, or our forgetfulness of actual facts to so carry us away. We may be sure that the individual who has proven his nervous system to be so unstable as to allow repeated functional convulsions, will never pass through life unfettered, but fearful always of the dark hour that may return.

Dana, in his work on nervous diseases, says that five or ten per cent. of epileptics recover; but he fails to define recovery. Nothnagel, and numerous other writers, make the same unqualified assertion, while but few writers have candidly said that the so-called cure of epilepsy is merely the granting of the remission, not the permanent state of regained health.

The writer knows one epileptic twenty-one years of age, who had the first convulsion at seventeen, the second at eighteen, and the third only a short time ago. He is a sufferer from spinal curvature, a weak, ill-shapen dwarf; and yet he went one year between his first and second convulsions, and two years between the second and third. Supposing he were to go two years now without an attack, should we call him recovered? A few days ago we should have done so. He states that only overloading his stomach with candy will produce a convulsion. If he should let candy alone, has a cure been wrought, or a respite granted?

The length of these remissions seems to have but little influence on the actual prognosis. If memory serves me right, one of the cases discharged from Craig Colony had had a checkered career in state asylums, county alms-houses, and was often picked up on the street as an unconscious vagrant; he had an average credit of one hundred to one hundred and fifty convulsions a month. One hundred and ten attacks were charged to him during his first month at Craig Colony, yet that man recovered, as custom speaks. Here is the lad referred to, twenty-one years old, with only three convulsions in four years, and we dare not call him recovered. The prognosis really rests upon the removability, or non-removability, of the fundamental cause, and not upon the number or severity, or any other conditions, that are apparent in the seizures.

If we find one patient suffering from too much uric acid, we cut off his meat, and limit his consumption of the pulses; and he improves, perhaps enjoying long remissions, possibly of years, yet we would not think that a cure had been wrought, so long as the uncertain fate of future seizures hung over him. Sometimes we find a man who has abused his liver with drink, his kidneys have become involved, and by physiological hygiene we relieve these abused organs, and may be rewarded for our work by long remissions.

Now the question remains, do we cure epilepsy and allow the patient to recover; or do we grant immunity, as if we were using a higher vaccination? A very few cases do actually get well, and remain so, by some structural change wrought in the cell organism; but the most recoveries are simply respites granted by the removal of immediate causes. Then let us not forget our duty to the patient, to his friends, and to the public, and while we set a limit upon his detention, pronouncing him cured or recovered after one year, or better two years, of freedom from convulsions, at the same time let us not forget our higher duty in protecting society, by warning him against begetting offspring and forming entangling family alliances, which he would most likely be unable to carry to a happy termination.

86. RECHERCHES SUR L'ORIGINE RÉELLE DES NERFS CRANIENS. LE NERF GLOSSO-PHARYNGIEN ET LE NERF VAGUE (Researches on the Real Origin of the Cranial Nerves. The Glossopharyngeus and the Vagus). A. Van Gehuchten (Journal de Neurologie, Nos. 22, 23 and 25, 1898, and No. 2, 1899).

Van Gehuchten finds that in the rabbit the ventral nucleus of the vagus forms a long column of cells of more than four millimeters in length. This column begins just below the facial nucleus and extends as far as the lower border of the hypoglossal nucleus. The ventral nucleus on its inner and most proximal portion contains cells belonging to the ninth nerve. The ventral nucleus is sharply defined from the surrounding cells only in its uppermost part. The vagus nerve receives no fibers from the hypoglossal nucleus or from the intercalated nucleus of Staderini, and contains no crossed fibers from the nucleus on the opposite side of the medulla oblongata. Intracranial section of the eleventh nerve shows that the nerve of Willis does not arise in the ventral nucleus of the vagus, and that the dorsal nucleus gives origin to fibers belonging to the accessory nerve of Willis and the vagus. The glossopharyngeus has no origin in the dorsal nucleus. Van Gehuchten acknowledges that he was mistaken in his former opinion, and now states that the cells of the terminal nuclei of peripheral sensory nerves do not undergo chromatolysis during the first few days following section of the nerve. He has succeeded in staining the cells of the dorsal nucleus with the silver stain, and has traced the axis cylinders of these cells into the tenth nerve. He has, therefore, given us the very best proof that the posterior nucleus of the vagus is motor.

The method of Marchi shows that the sensory fibers of the tenth nerve form a large part of the solitary bundle in the rabbit. The sensory nucleus of the vagus lies between the solitary bundle and the dorsal motor nucleus of the vagus. Van Gehuchten proposes to call this the nucleus of the solitary bundle.

If the glossopharyngeus is cut at the base of the cranium, chromatolysis occurs in a small group of cells situated on the inner side of the ventral nucleus of the vagus at its upper part, and immediately below the internal column of cells of the facial nucleus. This group is not found in many sections, and represents the motor nucleus of the ninth nerve. The glossopharyngeus nerve forms part of the solitary bundle, as shown by Marchi's method, and at least the proximal portion of the nucleus of the solitary bundle is the terminal nucleus of the sensory fibers of this nerve. SPILLER.